

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A patch panel system, comprising:
 - an interface unit that includes a plurality of ports configured to connect to a plurality of user devices, the interface unit being configured to:
 - receive one or more analog signals output from a user device of the plurality of user devices via a port of the plurality of ports,
 - generate a packet from the one or more analog signals, and
 - transmit the packet; and
 - a radio unit configured to:
 - receive the packet,
 - convert the packet to a depacketized radio signal representing only extracted payload bits, and
 - transmit the depacketized radio signal representing only extracted payload bits over a radio channel.
2. (Original) The system of claim 1, wherein the one or more analog signals are associated with a constant bit rate service.

3. (Original) The system of claim 1, wherein the interface unit includes a plurality of interface units each connected to a plurality of user devices and the radio unit includes a plurality of radio units configured to communicate over a plurality of types of radio channels.

4. (Original) The system of claim 1, wherein the ports include a plurality of different types of ports configured to connect to a plurality of different types of user devices.

5. (Original) The system of claim 1, wherein when generating a packet from the one or more analog signals, the interface unit is configured to:

digitize the one or more analog signals to obtain bit representations corresponding to the one or more analog signals,

use the bit representations for a payload portion of the packet, and

add header or framing information to the packet that identifies at least one of the radio unit and the radio channel.

6. (Original) The system of claim 5, wherein when adding header or framing information to the packet, the interface unit is configured to add Internet Protocol header information to the packet.

7. (Original) The system of claim 5, wherein when adding header or framing information to the packet, the interface unit is configured to add Ethernet framing information to the packet.

8. (Original) The system of claim 1, wherein the radio signal includes one of an amplitude modulated waveform and a frequency modulated waveform.

9. (Original) The system of claim 1, wherein the radio unit is further configured to depacketize the packet to obtain depacketized information; and
wherein when converting the packet to a radio signal, the radio unit is configured to convert the depacketized information to a radio signal.

10. (Original) The system of claim 1, wherein the radio unit is further configured to encrypt bits associated with the packet.

11. (Original) The system of claim 1, where a binding exists between the port and the radio channel.

12. (Original) The system of claim 11, further comprising:
a management unit configured to control the binding between the port and the radio channel.

13. (Original) The system of claim 1, wherein the radio unit includes a plurality of radio units with a plurality of associated radio channels, where a plurality of bindings exist between the ports of the interface unit and the radio channels associated with the radio units.

14. (Original) The system of claim 13, further comprising:

a management unit configured to control the bindings between the ports of the interface unit and the radio channels associated with the radio units.

15. (Original) The system of claim 14, wherein the management unit uses first addresses associated with the ports and second addresses associated with the radio channels to control the bindings between the ports and the radio channels, at least one of the first and second addresses being used to transmit the packet from the interface unit to the radio unit.

16. (Original) The system of claim 1, wherein the interface unit is further configured to:

receive signaling information,
recognize the signaling information, and
include the signaling information with the packet.

17. (Currently Amended) A patch panel system that includes a plurality of ports and a plurality of radio channels, comprising:

means for providing a binding between a port of the plurality of ports and a radio channel of the plurality of radio channels, the binding being based, at least in part, on addresses associated with the port and the radio channel;

means for receiving one or more analog signals output from a user device at the port;

means for generating a packet from the one or more analog signals;

means for transmitting the packet based, at least in part, on the address associated with the radio channel;

means for converting the packet to a depacketized radio signal representing only extracted payload bits; and

means for transmitting the depacketized radio signal representing only extracted payload bits over the radio channel.

18. (Currently Amended) A method for sending signals through a patch panel system that includes a plurality of ports and a plurality of channels, the method comprising:

providing a binding between a port of the plurality of ports and a channel of the plurality of channels, the binding being based, at least in part, on addresses associated with the port and the channel;

receiving one or more analog signals output from a user device at the port;

generating a packet from the one or more analog signals;

transmitting the packet based, at least in part, on the binding between the port and the channel;

converting the packet to a depacketized signal representing only extracted payload bits for transmission over the channel; and

transmitting the depacketized signal representing only extracted payload bits over the channel.

19-35. (Canceled)

36. (Currently amended) A patch panel system, comprising:

a first interface unit that includes a plurality of first ports configured to connect to a plurality of first user devices, the first interface unit being configured to:

receive one or more first analog signals output from a first user device of the plurality of first user devices via a first port of the plurality of first ports,
generate a first packet from the one or more first analog signals, and
transmit the first packet;

a first radio unit configured to:

receive the first packet,
convert the first packet to a first depacketized radio signal representing only extracted first payload bits, and
transmit the first depacketized radio signal representing only extracted first payload bits over a first radio channel;

a second radio unit configured to:

receive one or more second depacketized radio signals representing only extracted second payload bits,
generate a second packet from the one or more second depacketized radio signals representing only extracted second payload bits, and
transmit the second packet; and

a second interface unit that includes a plurality of second ports configured to connect to a plurality of second user devices, the second interface unit being configured to:

receive the second packet,
convert the second packet to a second analog signal, and

output the second analog signal to a second user device of the plurality of second user devices via a second port of the plurality of second ports.

37. (Original) The system of claim 36, wherein the first and second interface units include a same interface unit.

38. (Original) The system of claim 36, wherein the first and second radio units include a same radio unit.

39-44. (Canceled)